

REMARKS

The Office Action mailed March 5, 2004 has been carefully reviewed and the following remarks have been made in consequence thereof.

In accordance with 37 C.F.R. 1.136(a), a one-month extension of time is submitted herewith to extend the due date of the response to the Office Action dated March 5, 2004, for the above-identified patent application from June 5, 2004, through and including July 6, 2004. In accordance with 37 C.F.R. 1.17(a)(1), authorization to charge a deposit account in the amount of \$110.00 to cover this extension of time request also is submitted herewith.

Claims 1-28, 30, and 31 are pending in this application. Claims 1-11, 21-28, 30, and 31 are rejected. Claim 29 is canceled. Claims 12-20 are allowed.

The objection to the drawings is respectfully traversed. Within Figure 3, step 104 has been amended to recite "soak filter in a first solvent and a second solvent", and step 106 has been amended to recite "pass first and second solvents through second filter" in accordance with the specification. For at least the reasons above, Applicant respectfully requests the objection to the drawings be withdrawn.

The rejection of Claims 4 and 5 under 35 U.S.C. § 112, first paragraph is respectfully traversed. Applicant has amended Claim 4 to recite "soaking said filter in a first solvent and then soaking said filter in a second solvent prior to said step of weighing said filter" in accordance with the specification. Claim 5 depends from Claim 4. For at least the reasons set forth above, Applicant respectfully requests that the Section 112 rejection of Claims 4 and 5 be withdrawn.

The rejection of Claims 21 and 22 under 35 U.S.C. 102(e) as being anticipated by Damm et al. (U.S. Pat. No. 6,457,564) is respectfully traversed.

Damm et al. describe a lubrication system for supplying one or more gear driven devices whether or not the gear driven devices are being driven at the time. Accordingly,

Damm et al. describe an engine (10) that is coupled to a gear device (3). The engine includes a lubricant pump (6) that causes a lubricant (L) to flow from a lubricant sump (5) through an external lubricant line (7) that includes a filter (8). Damm et al. also describe that the gearbox includes a return line (23) including a filter (24) for filtering the lubricant before re-entering the engine.

Notably, Damm et al. do not describe nor suggest a system for performing a clean check on a gearbox having an inlet and an outlet, wherein the system includes a means for soaking a filter in a solvent.

Claim 21 recites a system for performing a clean check on a gearbox having an inlet and an outlet, wherein the system includes "a source of an oil-based fluid fluidly connected to said gearbox inlet...a first filter fluidly connected to said gearbox outlet...a preliminary filter fluidly connected between said source of an oil-based fluid and said gearbox inlet...a means for causing said oil-based fluid to flow through said gearbox, said preliminary filter, and said first filter...means for soaking said first filter in a solvent.

Damm et al. do not describe nor suggest the system recited in Claim 21. Specifically, Damm et al. do not describe or suggest a system for performing a clean check on a gearbox having an inlet and an outlet, wherein the system includes a means for soaking a first filter in a solvent. For at least the reasons above, Applicant respectfully submits that Claim 21 is patentable over Damm et al.

Claim 22 depends from independent Claim 21. When the recitations of Claim 22 are considered in combination with the recitations of Claim 21, Applicant submits that dependent Claim 22 likewise is patentable over Damm et al.

For at least the reasons above, Applicant respectfully requests the rejection of Claims 21 and 22 be withdrawn.

The rejection of Claims 1 and 6-11 under 35 U.S.C. 103(a) as being unpatentable over Damm et al. (U.S. Pat. No. 6,457,564) in view of Sakai et al. (Jap. Pat. No. JP10170504A) is respectfully traversed.

Damm et al. is described above. Sakai et al. describe a measuring apparatus that quantitatively evaluates a contaminant that is dissolved in a refrigerant oil. In use, the system is evacuated and the refrigerant oil is poured into a sample container (11). A mixed solution of refrigerant and refrigerant oil is passed through a filter inside a filter holder (12). On the basis of a change in weight of the filter holder or the filter inside the filter holder, a contaminant precipitated in the mixed solution can be evaluated.

Initially, Applicant respectfully disagrees with the assertion within the Office Action, at page 5, that Sakai et al. describe "comparing the contaminant weight to a predetermined level, wherein the gearbox is acceptable if the contaminant weight is below the predetermined level." Rather, Sakai et al. merely describe that a contaminant precipitated in a mixed solution can be evaluated based on the change in weight of the filter holder or the filter inside the filter holder. Sakai et al. therefore does not describe nor suggest determining whether a gearbox is acceptable based on whether the contaminant weight is below the predetermined level. Rather, Sakai et al. describe that the contaminated filter weight is compared to a non-contaminated filter weight to determine the quantity of contaminants precipitated in the refrigerant oil.

Claim 1 recites a method of performing a clean check on a gearbox, wherein the method includes "(a) flushing an oil-based fluid through said gearbox and then through a filter...(b) weighing said filter to determine the weight of contaminants collected in said filter...and (c) comparing said contaminant weight to a predetermined level, wherein said gearbox is acceptable if said contaminant weight is below said predetermined level."

Applicant respectfully submits that the Section 103 rejection of the presently pending claims is not a proper rejection. As is well established, obviousness cannot be established by combining the teachings of the cited art to produce the claimed invention, absent some

teaching, suggestion, or incentive supporting the combination. Applicant again reiterates that no combination of Damm et al. and Sakai et al. describe or suggest the claimed combination.

Moreover, Applicant respectfully resubmits that the combination of Damm et al. and Sakai et al. teaches away from the present invention, and accordingly, such a teaching supports the nonobviousness of the invention. U.S. v. Adams, 148 USPQ 479 (1966); Gillette Co. v. S.C. Johnson & Son, Inc., 16 USPQ2d 1923, 1927 (Fed. Cir. 1990). In light of this standard, it is respectfully submitted that the cited art, as a whole, is not suggestive of the presently claimed invention. Specifically, Applicant respectfully submits that no combination of Damm et al. and Sakai et al. describe or suggest a method of performing a clean check on a gearbox, wherein the method includes "weighing said filter to determine the weight of contaminants collected in said filter...and (c) comparing said contaminant weight to a predetermined level, wherein said gearbox is acceptable if said contaminant weight is below said predetermined level." More specifically, Damm et al. do not describe nor suggest weighing a filter to determine the weight of contaminants collected in the filter, and in contrast to Damm et al. and the recitations of the present invention, Sakai et al. describe comparing the weight of a contaminated filter to the weight of an uncontaminated filter to determine the quantity of contaminants within the contaminated filter. Accordingly, Sakai et al. do not describe or suggest weighing a filter to determine the weight of contaminants collected in the filter...and comparing the contaminant weight to a predetermined level, wherein a gearbox is acceptable if the contaminant weight is below the predetermined level.

Moreover, Applicant respectfully submits that "[i]n relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art. In re King, 231 USPQ 136 (Fed. Cir. 1986). The examiner has not provided any basis in fact and/or technical reasoning that the systems or methods taught by Damm et al. or Sakai et al. include a step for "weighing a filter to determine the weight of contaminants collected in the filter...and comparing the contaminant weight to a predetermined level, wherein the gearbox is acceptable if the contaminant weight is below the

predetermined level." Further, the assertion in the office action that "determining the quality of the lubricant in the system (since it is inherent that filter is changed periodically)" mischaracterizes the claimed invention. Applicant respectfully submits that Claim 1 recites "weighing a filter to determine the weight of contaminants collected in the filter" and does not recite "determining the quality of the lubricant in the system" as recited in the Office Action. For at least the reasons above, Applicant respectfully submits that Claim 1 is patentable over Damm et al. in view of Sakai et al.

Claims 6-11 depend from independent Claim 1. When the recitations of Claims 6-11 are considered in combination with the recitations of Claim 1, Applicant submits that dependent Claims 6-11 likewise are patentable over Damm et al. in view of Sakai et al.

For the reasons set forth above, Applicant respectfully requests that the Section 103 rejection of Claims 1, and 6-11 be withdrawn.

The rejection of Claims 2-5 under 35 U.S.C. 103(a) as being unpatentable over Damm et al. (U.S. Pat. No. 6,457,564) in view of Sakai et al. (Jap. Pat. No. JP10170504A) and further in view of Kodaira et al. (Jap. Pat. No. JP10170504A) is respectfully traversed.

Damm et al. and Sakai et al. are described above. Kodaira et al. describe a method of determining a quantity of machining oil remaining on a surface of a metal product cleaned with a cleaner. The method includes placing the metal product into a cleaning tank containing a solvent, dissolving the machining oil using the solvent, extracting the mixture of cleaning oil and solvent through a filter, and measuring the quantity of cleaning oil using a concentration meter or an infrared spectrum analysis system.

Claims 2-5 depend from Claim 1 which recites a method of performing a clean check on a gearbox, wherein the method includes "(a) flushing an oil-based fluid through said gearbox and then through a filter...(b) weighing said filter to determine the weight of contaminants collected in said filter...and (c) comparing said contaminant weight to a

predetermined level, wherein said gearbox is acceptable if said contaminant weight is below said predetermined level.”

Applicant respectfully submits that the Section 103 rejection of the presently pending claims is not a proper rejection. As is well established, obviousness cannot be established by combining the teachings of the cited art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combination. Applicant again reiterates that no combination of Damm et al., Sakai et al., nor Kodaira et al., alone or in combination, describe or suggest the claimed combination.

Moreover, Applicant respectfully resubmits that the combination of Damm et al., Sakai et al., and Kodaira et al. teaches away from the present invention, and accordingly, such a teaching supports the nonobviousness of the invention. U.S. v. Adams, 148 USPQ 479 (1966); Gillette Co. v. S.C. Johnson & Son, Inc., 16 USPQ2d 1923, 1927 (Fed. Cir. 1990). In light of this standard, it is respectfully submitted that the cited art, as a whole, is not suggestive of the presently claimed invention. Specifically, Applicant respectfully submits that no combination of Damm et al., Sakai et al., and Kodaira et al. describe or suggest a method of performing a clean check on a gearbox, wherein the method includes “weighing said filter to determine the weight of contaminants collected in said filter...and (c) comparing said contaminant weight to a predetermined level, wherein said gearbox is acceptable if said contaminant weight is below said predetermined level.” More specifically, Damm et al. does not describe or suggest weighing a filter to determine the weight of contaminants collected in the filter, and in contrast to Damm et al. and the claimed invention, Sakai et al. describe comparing the weight of the contaminated filter to the weight of the uncontaminated filter to determine the quantity of contaminants within the contaminated filter. Accordingly, Sakai does not describe or suggest weighing a filter to determine the weight of contaminants collected in the filter...and comparing the contaminant weight to a predetermined level, wherein a gearbox is acceptable if the contaminant weight is below the predetermined level. Finally, and in contrast to Damm et al. and Sakai et al., Kodaira et al. describe measuring the quantity of cleaning oil using a concentration meter or an infrared

spectrum analysis system. Accordingly, none of Damm et al. and Sakai et al., or Kodaira et al., alone or in combination, describe or suggest weighing a filter to determine the weight of contaminants collected in the filter, and comparing the contaminant weight to a predetermined level, wherein the gearbox is acceptable if the contaminant weight is below a predetermined level. For at least the reasons above, Applicant respectfully submits that Claim 1 is patentable over Damm et al. in view of Sakai et al. and further in view of Kodaira et al.

Claims 2-5 depend from independent Claim 1. When the recitations of Claims 2-5 are considered in combination with the recitations of Claim 1, Applicant submits that dependent Claims 2-5 likewise are patentable over Damm et al. in view of Sakai et al. and further in view of Kodaira et al.

For the reasons set forth above, Applicant respectfully requests that the Section 103 rejection of Claims 2-5 be withdrawn.

The rejection of Claims 23, 24, and 30 under 35 U.S.C. 103(a) as being unpatentable over Damm et al. (U.S. Pat. No. 6,457,564) is respectfully traversed.

Damm et al. is described above. Claims 23, 24, and 30 depend from Claim 21 which recites a system for performing a clean check on a gearbox having an inlet and an outlet, wherein the system includes "a source of an oil-based fluid fluidly connected to said gearbox inlet...a first filter fluidly connected to said gearbox outlet...a preliminary filter fluidly connected between said source of an oil-based fluid and said gearbox inlet...means for causing said oil-based fluid to flow through said gearbox, said preliminary filter, and said first filter... and means for soaking said first filter in a solvent."

Damm et al. do not describe nor suggest the system recited in Claim 21. Specifically, Damm et al. do not describe or suggest a system for performing a clean check that includes a means for soaking a first filter in a solvent. Rather, Damm et al. do not describe or suggest a

means for soaking a filter in a solvent. For at least the reasons set forth above, Claim 21 is submitted to be patentable over Damm et al.

Claims 23, 24, and 30 depend from independent Claim 21. When the recitations of Claims 23, 24, and 30 are considered in combination with the recitations of Claim 21, Applicant respectfully submits that dependent Claims 23, 24, and 30 likewise are patentable over Damm et al.

For the reasons set forth above, Applicant respectfully requests that the Section 103 rejection of Claims 23, 24, and 30 be withdrawn.

The rejection of Claims 25-28 and 31 under 35 U.S.C. 103(a) as being unpatentable over Damm et al. (U.S. Pat. No. 6,457,564) in view of Randolph (U.S. Pat. No. 5,730,870) is respectfully traversed.

Damm et al. is described above. Randolph describes a method and apparatus for back-flushing or cleaning a used filter element from a vehicle motor. A filler means (100) is connected with at least one sealable opening (13a, 13b) for guiding liquid solvent into the sealable openings. In operation, the operator passes the selected solvent through the openings to back-flush or cleanse a used filter element of undesired debris.

Initially, Applicant respectfully disagrees with the assertion within the Office Action, at page 9 that Randolph describes a clean check lubrication device that includes "a source of an oil-based fluid fluidly connected to a gearbox inlet and a filter connected to a gearbox outlet". Rather, Randolph describes a vehicle motor and an oil pump system including an oil filter that is connected to an oil pump, wherein the filter includes an inlet connected to a filler means (100) and an exit tube (106) extending from an opening 113b to direct the exiting solvent to storage. Accordingly, Randolph does not describe nor suggest "a source of an oil-based fluid fluidly connected to a gearbox inlet and a filter connected to a gearbox outlet."

Further, Randolph does not describe nor suggest "a first filter fluidly connected to said gearbox outlet...a preliminary filter fluidly connected between said source of an oil-

based fluid and said gearbox inlet...means for causing said oil-based fluid to flow through said gearbox, said preliminary filter, and said first filter...and means for soaking said first filter in a solvent." Rather, Randolph describes an inlet connected to a filler means (100) and an exit tube (106) extending from opening 113b to direct the exiting solvent to storage. Specifically, Randolph does not describe a gearbox, a preliminary filter, a first filter, and a means for soaking the first filter in solvent.

Claim 25 has been canceled. Claims 26-28 and 31 depend from Claim 21 which recites a system for performing a clean check on a gearbox having an inlet and an outlet, wherein the system includes "a source of an oil-based fluid fluidly connected to said gearbox inlet...a first filter fluidly connected to said gearbox outlet...a preliminary filter fluidly connected between said source of an oil-based fluid and said gearbox inlet...a means for causing said oil-based fluid to flow through said gearbox, said preliminary filter, and said first filter...means for soaking said first filter in a solvent.

Neither Damm et al. nor Randolph, alone or in combination, describe or suggest the system recited in Claim 21. Specifically, neither Damm et al. nor Randolph describe or suggest a system for performing a clean check on a gearbox having an inlet and an outlet, wherein the system includes means for soaking the first filter in a solvent. Rather, Damm et al. does not describe or suggest a means for soaking a filter in a solvent, and Randolph describes that an operator passes solvent through the openings of a filter to back-flush or cleanse the used filter element of undesired debris. For at least the reasons above, Applicant respectfully submits that Claim 21 is patentable over Damm et al. in view of Randolph.

Claim 25 has been canceled. Claims 26-28 and 31 depend from Claim 21. When the recitations of Claims 26-28 and 31 are considered in combination with the recitations of Claim 21, Applicant submits that dependent Claims 26-28 and 31 likewise are patentable over Damm et al. in view of Randolph.

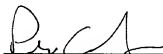
For at least the reasons above, Applicant respectfully requests the rejection of Claims 25-28 and 31 be withdrawn.

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In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully Submitted,



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